LPDES PERMIT NO. LA0064424, AI No. 4338

LPDES STATEMENT OF BASIS
FOR THE DRAFT LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM (LPDES) PERMIT TO DISCHARGE TO WATERS OF LOUISIANA

Company/Facility Name: Cavenham Forest Industries, Inc.
Urania Site Closure
Post Office Box 519
Urania, Louisiana 71480

Issuing Office: Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
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Date Prepared: January 25, 2008

Permit Action/Status:

I. Reason For Permit Action:

Proposed reissuance of an expired Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term following regulations promulgated at LAC 33:IX.2711/40 CFR 122.46*.

* In order to ease the transition from NPDES to LPDES permits, dual regulatory references are provided where applicable. The LAC references are the legal references while the 40 CFR references are presented for informational purposes only. In most cases, LAC language is based on and is identical to the 40 CFR language. 40 CFR Parts 401, 405-415, and 417-471 have been adopted by reference at LAC 33:IX.4903 and will not have dual references. In addition, state standards (LAC 33:IX Chapter 11) will not have dual references.

LAC 33:IX Citations: Unless otherwise stated, citations to LAC 33:IX refer to promulgated regulations listed at Louisiana Administrative Code, Title 33, Part IX.

40 CFR Citations: Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations in accordance with the dates specified at LAC 33:IX.2301.F, 4901, and 4903.

A. LPDES permit -
LPDES permit effective date: November 1, 2002
LPDES permit expiration date: October 31, 2007
EPA has not retained enforcement authority

B. Application received on May 7, 2007.

II. Facility Information:

A. Location - 1326 Mill Road in Urania, LaSalle Parish (Latitude 31°51'37", Longitude 92°17'57")

B. Applicant Activity - Groundwater Remediation Project

This facility was formerly operated as a creosote plant by Crown Zellerbach (Crown). Back in the 1920s, oil field exploration and production activities occurred at this site, which was prior to Crown's operations. On or about May 5, 1986, the permittee assumed operation and ownership from Crown and subsequently closed the creosote plant.

The former creosote plant is undergoing Resource Conservation and Recovery Act (RCRA) corrective action. The contaminated area is 10 acres in size (extending into the soil to a depth of 20 to 25 feet) and surrounded by a slurry wall. The groundwater recovery system generates groundwater which is contaminated with Pentachlorophenol, Polynuclear Aromatic Hydrocarbons (PAHs), and oil field constituents (oil and brine). The Pentachlorophenol and some of the PAHs are from the former wood treating process and the remaining contaminants are from adjacent petroleum production activities by other facilities.

C. Technology Basis - (40 CFR Chapter 1, Subchapter N/Parts 401, 405-415, and 417-471 have been adopted by reference at LAC 33:IX.4903)

Guideline	Reference
N/A	N/A

Other sources of technology based limits:
Current permit (effective November 1, 2002)
40 CFR 414, Subpart I
State Empirical Limits
Best Professional Judgement (BPJ)

D. Fee Rate -
1. Fee Rating Facility Type: Minor
2. Complexity Type: I; set using BPJ - see Section V.A
3. Wastewater Type: II
4. SIC code: 9999 (formerly 2491)

E. Facility Effluent Flow - 0.00292 MGD

III. Receiving Waters: Unnamed drainage ditch, thence into Mill Creek, thence into Castor Creek

1. TSS (15%), mg/L: 6.0
2. Average Hardness, mg/L $CaCO_3$: 26.4
3. Critical Flow, cfs: 1.47
4. Mixing Zone Fraction: 1
5. Harmonic Mean Flow, cfs: 5.68
6. River Basin: Ouachita River, Subsegment No. 081501
7. Designated Uses:
The designated uses are primary contact recreation, secondary contact recreation, and fish and wildlife propagation.

Information based on the following: Recommendation from the Engineering Section. Hardness and 15% TSS data were taken from ambient monitoring station #79 on Castor Creek near Tullos, Louisiana at the bridge on U.S. Highway 84, 1.8 miles west of the junction of U.S. Highway 84 and U.S. Highway 165. This information was presented in a memorandum from Dorian Heroman to Sonja Loyd, dated July 10, 2007 (See Appendix A).

IV. Outfall Information:

Outfall 001

A. Type of wastewater - Treated groundwater and contact stormwater

B. Location - at the point of discharge from the outfall pipe connected to the holding tank prior to combining with other waters at Latitude 31°51'42", Longitude 92°18'14".

C. Treatment - treatment of these wastewaters consists of:
- Physical Separation
- Biological Treatment
(Fixed-Film Reactor and Rock-Reed Filter Unit)
- Activated Carbon Filter

D. Flow - Batch, (Max 30-Day) 0.00292 MGD

E. Receiving waters - unnamed drainage ditch, thence into Mill Creek, thence into Castor Creek

F. Basin and subsegment - Ouachita River Basin, Subsegment No. 081501

V. Proposed Changes from Current Permit:

Summary of Proposed Changes From the Current LPDES Permit:

A. The complexity designation was inadvertently designated as "II" in the Statement of Basis for the current permit. It will be changed to reflect "I" since the facility has ceased its operations as a wood treating facility.

B. The water quality-based limits and monitoring requirements for Chromium VI, Total Lead, Total Mercury, and Total Phenols will be removed from the draft permit. A reasonable potential analysis was performed using the sample data provided by the permittee in the 2007 Application. The results of the analysis revealed that this permittee had no reasonable potential to violate the water quality standards for these parameters.

C. During a conversation with Winston Russell on August 13, 2007, this Office was notified that the groundwater remediation project operates year round; however, the wastewater is discharged on a batch basis. A DMR review for the period of November 2002 through March 2008 revealed that there were 15 discharge events which occurred since the reissuance of the current permit. This information provided evidence to support establishing a monitoring frequency of once per batch for the outfall. Therefore, the monitoring frequency for flow will be changed from continuous to once per batch. The monitoring frequency for the other parameters will be changed from once per month to once per batch. The monitoring frequency for the priority pollutants will remain at once per six months.

D. The outfall sampling location has been changed to read as follows: "At the point of discharge from the outfall pipe connected to the holding tank prior to combining with other waters"

E. In an effort to adequately evaluate the discharge, a provision requiring the submittal of analytical data not provided in the 2007 Application will be added to the reopener clause in Part II, Paragraph I of the draft permit. This provision requires the facility to submit analytical data within one (1) year

after the effective date of the permit in accordance with LAC 33:IX.2501.G.7.c. Upon submittal of the analytical data, the LDEQ may choose to modify this permit to change the effluent limits based on this information.

F. The facility discharges to a Water Quality Act 303(d) stream. Therefore, a reopener clause will be added to Part II of the draft permit in the event that the permit requires reassessment regarding 303(d) status resulting in incorporation of the results of any modifications to the Total Maximum Daily Loading (TMDL) of the receiving waterbody.

G. Updated Part II conditions for stormwater discharges associated with industrial activities will be established in the draft permit.

H. The provision in the Part II conditions that required submittal of DMRs to the Northeast Regional Office will be removed from the draft permit. All DMRs sent to the Office of Environmental Compliance/Permit Compliance Unit are scanned into the Electronic Document Management System which is accessible to all LDEQ personnel.

VI. Permit Limit Rationale:

The following section sets forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit.

A. Outfall 001 - Treated groundwater and contact stormwater

These wastewaters being discharged to a discrete outfall receive BPJ limits and monitoring requirements according to the following schedule:

PARAMETERS	MONTHLY AVERAGE	DAILY MAXIMUM	MONITORING FREQUENCY (*1)
Flow (MDG)	Report	Report	1/batch
COD	---	100 mg/L	1/batch
Chlorides	Report (mg/L)	Report (mg/L)	1/batch
pH	6.0 S.U. (Min)	9.0 S.U. (Max)	1/batch
Phenol	15 µg/L	26 µg/L	1/batch

PARAMETERS	MONTHLY AVERAGE	DAILY MAXIMUM	MONITORING FREQUENCY (*1)
2,4-Dichlorophenol	39 µg/L	112 µg/L	1/batch
2,4-Dimethylphenol	18 µg/L	36 µg/L	1/batch
3,4-Benzofluoranthene	23 µg/L	61 µg/L	1/batch
Benzo(k) fluoranthene	22 µg/L	59 µg/L	1/batch
Pyrene	25 µg/L	67 µg/L	1/batch
Benzo(a)pyrene	23 µg/L	61 µg/L	1/batch
Fluorene	22 µg/L	59 µg/L	1/batch
Fluoranthene	25 µg/L	68 µg/L	1/batch
Chrysene	22 µg/L	59 µg/L	1/batch
Naphthalene	22 µg/L	59 µg/L	1/batch
Acenaphthylene	22 µg/L	59 µg/L	1/batch
Pentachlorophenol	---	100 µg/L	1/batch
Indeno (1,2,3-cd)pyrene	---	100 µg/L	1/batch
Benzo(g,h,i)perylene	---	100 µg/L	1/batch
2,4-Dinitrophenol	71 µg/L	123 µg/L	1/batch
Benzo(a)anthracene	22 µg/L	59 µg/L	1/batch
Dibenzo(a,h) anthracene	---	100 µg/l	1/batch
2-chlorophenol	31 µg/L	98 µg/L	1/batch
Phenanthrene	22 µg/L	59 µg/L	1/batch
Acenaphthene	---	100 µg/L	1/batch
Benzo(b)fluoranthene	---	100 µg/L	1/batch
Priority Pollutants (*2)			
Acid Extractable Priority Organics	Report (µg/L)	Report (µg/L)	1/6 months

PARAMETERS	MONTHLY AVERAGE	DAILY MAXIMUM	MONITORING FREQUENCY (*1)
Base/Neutral Extractable Priority Organics	Report (µg/L)	Report (µg/L)	1/6 months
Volatile Compounds	Report (µg/L)	Report (µg/L)	1/6 months
Listed Priority Metals			
Arsenic	Report (µg/L)	Report (µg/L)	1/6 months
Chromium III	Report (µg/L)	Report (µg/L)	1/6 months
Copper	Report (µg/L)	Report (µg/L)	1/6 months
Nickel	Report (µg/L)	Report (µg/L)	1/6 months
Zinc	Report (µg/L)	Report (µg/L)	1/6 months

(*1) When discharging.

(*2) Excluding those parameters specifically limited at this outfall. For the priority pollutant classes listed, a priority pollutant scan on a first flush sample shall be performed twice per year and the results submitted as an addendum to the Discharge Monitoring Reports. If the results of the priority pollutant scan measure non-detect in the first two sets of sample data, the permittee may request a reduction in the monitoring frequency from once per six months to once per year. Monitoring of all of the Volatile Compounds may automatically be discontinued if all Volatiles Compounds measure non-detect (below the MQL) in the first two sets of sample data.

Site-Specific Consideration(s)

Flow - monitoring requirements are established in accordance with LAC 33:IX.2707.I.1.b. These requirements have been retained from the current permit, effective November 1, 2002.

pH - limits are established in accordance with LAC 33:IX.1113.C.1. These requirements have been retained from the current permit, effective November 1, 2002.

COD - limit is established in accordance with BPJ. These requirements have been retained from the current permit, effective November 1, 2002.

Chlorides - monitoring requirements are established in accordance with BPJ. These requirements have been retained from the current permit, effective November 1, 2002.

Phenol, 2,4-Dichlorophenol, 2,4-Dimethylphenol, 3,4-Benzofluoranthene, Benzo(k)fluoranthene, Pyrene, Benzo(a)pyrene, Fluorene, Fluoranthene, Chrysene, Naphthalene, Acenaphthylene, 2,4-Dinitrophenol, Benzo(a)anthracene, 2-chlorophenol, and Phenanthrene - limits are established by BPJ in accordance with the effluent guidelines at 40 CFR 414, Subpart I. These requirements have been retained from the current permit, effective November 1, 2002.

Pentachlorophenol, Indeno(1,2,3-cd)pyrene, Benzo(g,h,i)perylene, Dibenzo(a,h)anthracene, Acenaphthene, and Benzo(b)fluoranthene - limits are established by BPJ using BAT state empirical limits for Hazardous Waste sites. These requirements have been retained from the current permit, effective November 1, 2002.

Acid Extractable Priority Organics - monitoring requirements are established in accordance with BPJ. These requirements have been retained from the current permit, effective November 1, 2002.

Acid Extractable Priority Organics - monitoring requirements are established in accordance with BPJ. These requirements have been retained from the current permit, effective November 1, 2002.

Base/Neutral Extractable Priority Organics - monitoring requirements are established in accordance with BPJ. These requirements have been retained from the current permit, effective November 1, 2002.

Volatile Compounds - monitoring requirements are established in accordance with BPJ. These requirements have been retained from the current permit, effective November 1, 2002.

Total Arsenic, Total Chromium (Chromium III), Total Copper, Total Nickel and Total Zinc - monitoring requirements are established in accordance with BPJ. These requirements have been retained from the current permit, effective November 1, 2002.

Storm Water Pollution Prevention Plan (SWP3) Requirements

In accordance with LAC 33:IX.2707.I.3 and [40 CFR 122.44(I)(3) and (4)], a Part II condition is proposed for applicability to all storm water discharges from the facility, either through permitted outfalls or through outfalls which are not listed in the permit or as sheet flow. The Part II condition requires a Storm Water Pollution Prevention Plan (SWP3) within six (6) months of the effective date of the final permit, along with other requirements. If the permittee maintains other plans that contain duplicative information, those plans could be incorporated by reference to the SWP3. Examples of these type plans include, but are not limited to: Spill Prevention Control and Countermeasures Plan (SPCC), Best Management Plan (BMP), Response Plans, etc. The conditions will be found in the draft permit. Including Best Management Practice (BMP) controls in the form of a SWP3 is consistent with other LPDES and EPA permits regulating similar discharges of stormwater associated with industrial activity, as defined in LAC 33:IX.2522.B.14 [40 CFR 122.26(b)(14)].

VII. Water Quality-Based Effluent Limitations:

Sample data from the permittee's 2007 application were screened against state water quality numerical standard based limits by following guidance procedures established in the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, April 16, 2008. Calculations, results, and documentation are given in Appendix A.

In accordance with LAC 33:IX.2707.D.1/40 CFR § 122.44(d)(1), the existing (or potential) discharge (s) was evaluated in accordance with the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, April 16, 2008, to determine whether pollutants would be discharged "at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard." Calculations, results, and documentation are given in Appendix B.

The following pollutants received water quality based effluent limits:

None

Minimum quantification levels (MQLs) for state water quality numerical standards-based effluent limitations are set at the values listed in the Permitting Guidance Document for Implementing

Louisiana Surface Water Quality Standards, LDEQ, April 16, 2008. They are also listed in Part II of the permit.

VIII. TMDL Waterbodies:

Subsegment No. 081501 of the Ouachita River Basin is not listed on the Final 2006 Integrated 303(d) List since the TMDL Assessments have been completed for the Castor Creek Watershed for organic enrichment/low Dissolved Oxygen (DO), Total Dissolved Solids (TDS), and Chlorides which were previously identified as impairments. Below is information related to the TMDL Assessments:

Organic enrichment/low DO

The *Castor Creek Watershed TMDL for Biological Oxygen-Demand Substances* was finalized on May 31, 2002. According to the TMDL Report, the point sources that fall within this subsegment were deemed either intermittent stormwater or minor discharges on unnamed tributaries and were not included in the model. It was further stated that the "limits for these small facilities are generally set by state policy or guidelines and can continue as such". Therefore, the daily maximum limit for COD will be retained in the draft permit.

TDS/Chlorides

The *Castor Creek Watershed TMDL for Chlorides and Salinity/TDS* was finalized on June 13, 2002. According to the TMDL Report, the point sources located within this watershed are small and discharge into tributaries of Castor Creek. Therefore, these point sources have been determined to have no real impact on the overall loading of chlorides and TDS in Castor Creek. It was further stated in the report that chlorides and TDS loadings in Castor Creek are dominated by non-point sources from natural background sources and man-induced activities related to oil and gas production throughout the watershed. Since this permittee discharges treated groundwater from a groundwater remediation project which is located within a former oil field, the monitoring requirements for Chlorides will be retained in the draft permit.

A reopener clause has been placed in Part II of the permit to allow for more stringent or additional limits or requirements to be placed in the permit, if needed, as a result of any modifications to the TMDLs.

IX. Compliance History/DMR Review:

A compliance history/DMR review was performed for the period of November 2002 through March 2008:

A. A DMR review of the monitoring reports for the period of November 2002 through March 2008 revealed that there was an effluent violation of 5.0 µg/L for Total Lead. In addition, the review revealed that no monitoring results for the priority pollutants (with the exception of those limited for the outfall) or listed priority metals were submitted for the period of 2002, 2003, 2004, 2005, 2006, and 2007 when a discharge occurred that corresponded with the monitoring frequency specified for these pollutants. There were also numerous DMR deficiencies noted during the course of the review. The DMR deficiencies included, but were not limited to the following: (1) Numerous DMRs were not signed and dated; (2) Numerous DMRs had incorrect outfall and permit references; (3) Numerous DMRs did not contain a monitoring period; and (4) There were several DMR submittals that did not contain sample data for several parameters required to be tested.

B. Inspection - The most recent water inspection was performed on September 26, 2002. No areas of concern were noted.

C. Compliance History - None

X. Endangered Species:

The receiving waterbody, Subsegment No. 081501 of the Ouachita River Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 24, 2007 from Boggs (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

XI. Historic Sites:

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

XII. Tentative Determination:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in the application.

XIII. Variances:

No requests for variances have been received by this Office.

XIV. Public Notices:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper(s) of general circulation

Office of Environmental Services Public Notice Mailing List